Claims:

1. A DNAzyme which specifically cleaves RelA(p65) mRNA, the DNAzyme comprising

(i) a catalytic domain which cleaves mRNA at a purine:pyrimidine cleavage site;

(ii) a first binding domain contiguous with the 5' end of the catalytic domain; and

(iii)a second binding domain contiguous with the 3' end of the catalytic domain,

wherein the binding domains are sufficiently complementary to the two regions immediately flanking a purine:pyrimidine cleavage site within the region of RelA(p65) mRNA corresponding to nucleotides 1 to 1767 as shown in SEQ ID NO:1, such that the DNAzyme cleaves the RelA(p65) mRNA.

2. A DNAzyme as claimed in claim 1 wherein each binding domain is nine or more nucleotides in length.

3. A DNAzyme as claimed in claim 1 or claim 2 in which the catalytic domain has the nucleotide sequence GGCTAGCTACAACGA (SEQ ID NO: 2).

4. A DNAzyme as claimed in any one of claims 1 to 3 in which the cleavage site corresponds to a site selected from the group consisting of:

(i) the AT site at nucleotides 80-81;

(ii) the GT site at nucleotides 91-92;

(iii)the GT site at nucleotides 140-141;

(iv) the AT site at nucleotides 149-150;

(v) the AT site at nucleotides 215-216;

(vi) the AT site at nucleotides 237-238;

(vii) the AT site at nucleotides 260-261;
(viii) the GT site at nucleotides 350-351;
(ix) the GT site at nucleotides 438-439;
(x) the AT site at nucleotides 479-480;
(xi) the GT site at nucleotides 525-526;
(xii) the GT site at nucleotides 572-572;
(xiii) the AT site at nucleotides 583-584;
(xiv) the GT site at nucleotides 726-727;
(xv) the GT site at nucleotides 734-735;
(xvi) the AT site at nucleotides 749-750;
(xvii) the AT site at nucleotides 807-808;
(xviii) the GT site at nucleotides 830-831;
(xix) the AT site at nucleotides 951-952;
(xx) the GT site at nucleotides 963-964;
(xxi) the AT site at nucleotides 1070-1071;
(xxii) the GT site at nucleotides 1076-1077;
(xxiii) the GT site at nucleotides 1100-1101;
(xxiv) the AT site at nucleotides 1125-1126;
(xxv) the AT site at nucleotides 1175-1176;
(xxvi) the GT site at nucleotides 1235-1236;
(xxvii) the AT site at nucleotides 1279-1280;
(xxviii) the GT site at nucleotides 1307-1308;
(xxix) the GT site at nucleotides 1313-1314;
(xxx) the GT site at nucleotides 1387-1388;
(xxxi) the AT site at nucleotides 1416-1417;
(xxxii) the GT site at nucleotides 1484-1485;
(xxxiii) the GT site at nucleotides 1529-1530;
(xxxiv) the AT site at nucleotides 1553-1554; and
(xxxv) the AT site at nucleotides 1697-1698.

5. A DNAzyme as claimed in claim 4 in which the cleavage site corresponds to the GT site at nucleotides 91-92.

6. A DNAzyme as claimed in claim 1 which has a sequence selected from the group consisting of:

5' GTTCGTCCAGGCTAGCTACAACGAGGCCGGGGT 3' (SEQ ID NO:3);
5' GAGGGGGAAGGCTAGCTACAACGAAGTTCGTCC 3' (SEQ ID NO:4);
5' TGATCTCCAGGCTAGCTACAACGAATAGGGGCC 3' (SEQ ID NO:5);
5' GCTGCTCAAGGCTAGCTACAACGAGATCTCCAC 3' (SEQ ID NO:6);
5' CGCCTGGGAGGCTAGCTACAACGAGCTGCCCGC 3' (SEQ ID NO:7);
5' TTGGTGGTAGGCTAGCTACAACGACTGTGCTCC 3' (SEQ ID NO:8);
5' TGATCTTGAGGCTAGCTACAACGAGGTGGGGTG 3' (SEQ ID NO:9);
5' CCTTTCCTAGGCTAGCTACAACGAAAGCTCGTG 3' (SEQ ID NO:10);
5' TTCTTCACAGGCTAGCTACAACGAACTGGATTC 3' (SEQ ID NO:11);
5' TGGTCTGGAGGCTAGCTACAACGAGCGCTGACT 3' (SEQ ID NO:12);
5' TAGTCCCCAGGCTAGCTACAACGAGCTGCTCTT 3' (SEQ ID NO:13);
5' GGTCCCGCAGGCTAGCTACAACGATGTCACCTG 3' (SEQ ID NO:14);
5' CCTGCCTGAGGCTAGCTACAACGAGGGTCCCGC 3' (SEQ ID NO:15);
5' ACCTTGTCAGGCTAGCTACAACGAACAGTAGGA 3' (SEQ ID NO:16);
5' CTTTCTGCAGGCTAGCTACAACGACTTGTCACA 3' (SEQ ID NO:17);
5' ACACCTCAAGGCTAGCTACAACGAGTCCTCTTT 3' (SEQ ID NO:18);
5' CGGTGCACAGGCTAGCTACAACGACAGCTTGCG 3' (SEQ ID NO:19);
5' TCCGGAACAGGCTAGCTACAACGAAATGGCCAC 3' (SEQ ID NO:20);
5' TCGTCTGTAGGCTAGCTACAACGACTGGCAGGT 3' (SEQ ID NO:21);
5' ATCCGGTGAGGCTAGCTACAACGAGATCGTCTG 3' (SEQ ID NO:22);
5' GCACAGCAAGGCTAGCTACAACGAGCGTCGAGG 3' (SEQ ID NO:23);
5' GGGAAGGCAGGCTAGCTACAACGAAGCAATGCG 3' (SEQ ID NO:24);
5' GCTTGGGGAGGCTAGCTACAACGAAGAAGCTGA 3' (SEQ ID NO:25);
5' GTAAAGGGAGGCTAGCTACAACGAAGGGCTGGG 3' (SEQ ID NO:26);
5' GAAACACCAGGCTAGCTACAACGAGGTGGGAAA 3' (SEQ ID NO:27);
5' GGGGCAGGAGGCTAGCTACAACGATTGGGGAGG 3' (SEQ ID NO:28);
5' CAGAGCTGAGGCTAGCTACAACGAACCATGGCT 3' (SEQ ID NO:29);
5' GGACTGGGAGGCTAGCTACAACGAAGGGGCTGG 3' (SEQ ID NO:30);
5' GGGCTAGGAGGCTAGCTACAACGATGGGACAGG 3' (SEQ ID NO:31);
5' GGCCTCTGAGGCTAGCTACAACGAAGCGTTCCT 3' (SEQ ID NO:32);
5' TCTTCATCAGGCTAGCTACAACGACAAACTGCA 3' (SEQ ID NO:33);

5' AGTTGTCGAGGCTAGCTACAACGAGGATGCCAG 3' (SEQ ID NO:34);
5' GGGGGGCCAGGCTAGCTACAACGAAGGTATGCC 3' (SEQ ID NO:35);
5' CCATCAGCAGGCTAGCTACAACGAGGGCTCAGT 3' (SEQ ID NO:36);
and
5' AGAAGTCCAGGCTAGCTACAACGAGTCCGCAAT 3' (SEQ ID NO:37).

7. A DNAzyme as claimed in claim 6 which has the sequence 5' GAGGGGGAAGGCTAGCTACAACGAAGTTCGTCC 3'.

8. A DNAzyme as claimed in any one of claims 1 to 7, wherein the 3'-end nucleotide residue is inverted in the binding domain contiguous with the 3' end of the catalytic domain.

9. A pharmaceutical composition comprising a DNAzyme according to any one of claims 1 to 8 and a pharmaceutically acceptable carrier.

10. A method of inhibiting NF-κB activity in a cell which method comprises introducing into the cell a DNAzyme of any one of claims 1 to 8.

11. A method of inhibiting NF-κB activity in a subject which method comprises administering to the subject a pharmaceutical composition of claim 9.

12. A method of treating an inflammatory disease in a subject which method comprises administering to the subject a therapeutically effective dose of a pharmaceutical composition of claim 9.

13. A method as claimed in claim 12, wherein the inflammatory disease is selected from the group consisting of inflammatory arthritis, asthma, inflammatory bowel disease, septic shock and vasculitis.

14. A method as claimed in claim 13, wherein the inflammatory arthritis is selected from the group consisting of rheumatoid arthritis, osteoarthritis and seronegative arthritis.

15. A method of treating atherosclerosis in a subject which method comprises administering to the subject a therapeutically effective dose of a pharmaceutical composition of claim 9.

16. A method of treating cancer or leukaemia in a subject which comprises administering to the subject a therapeutically effective dose of a pharmaceutical composition of claim 9.

17. A method as claimed in any one of claims 10 to 15, wherein the method is performed *in vivo*.

18. A method as claimed in any one of claims 10 to 15, wherein the method is performed *ex vivo*.